

1/10

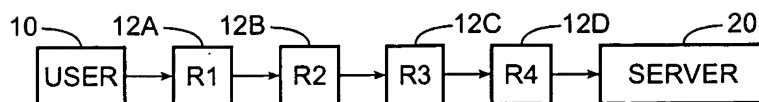


FIG. 1
(PRIOR ART)

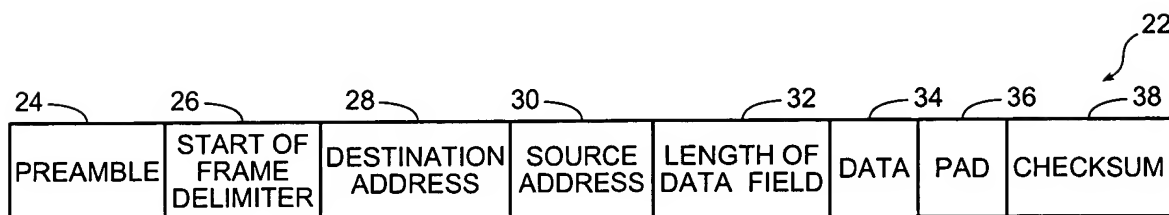


FIG. 2A
(PRIOR ART)

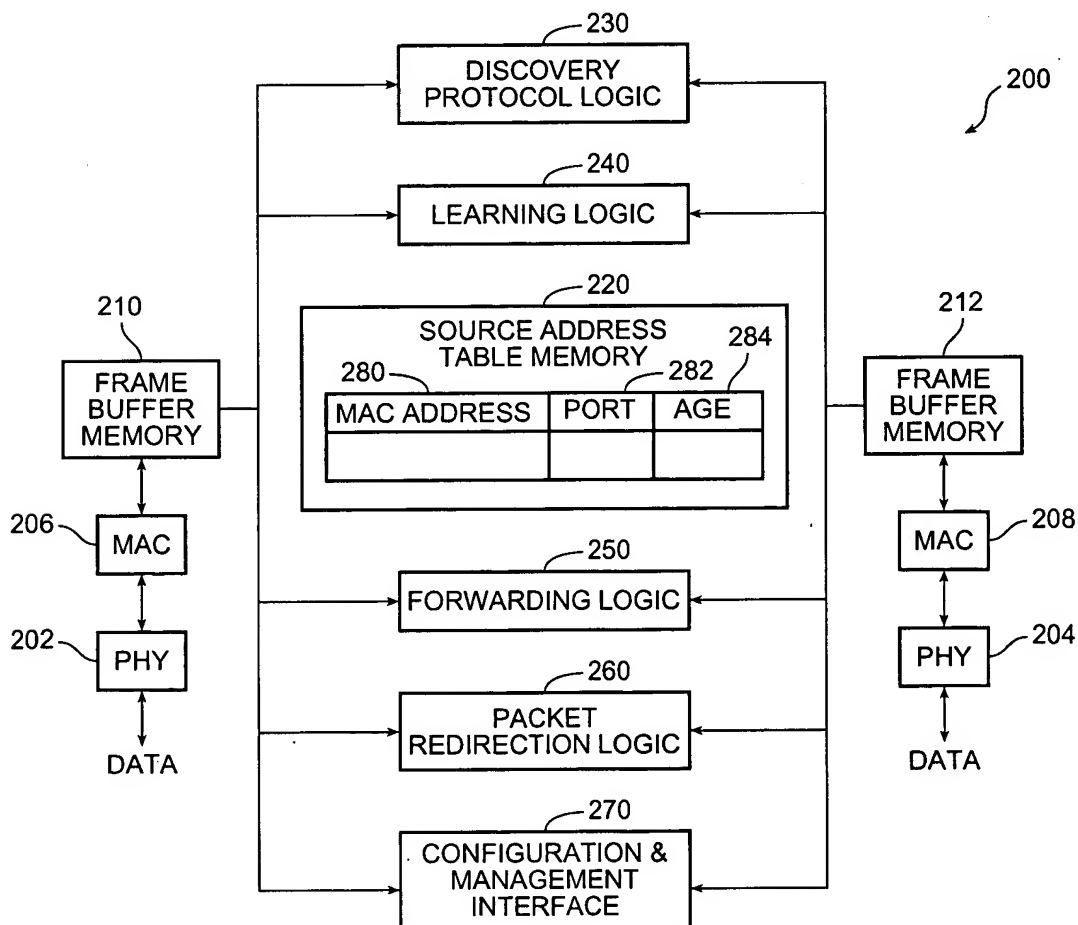
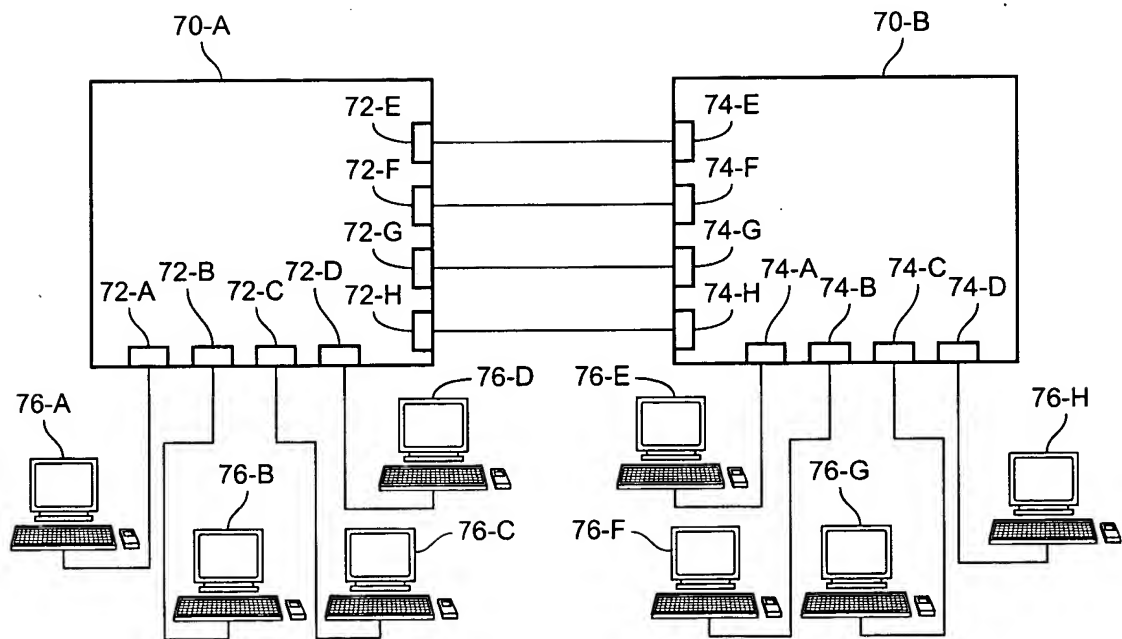
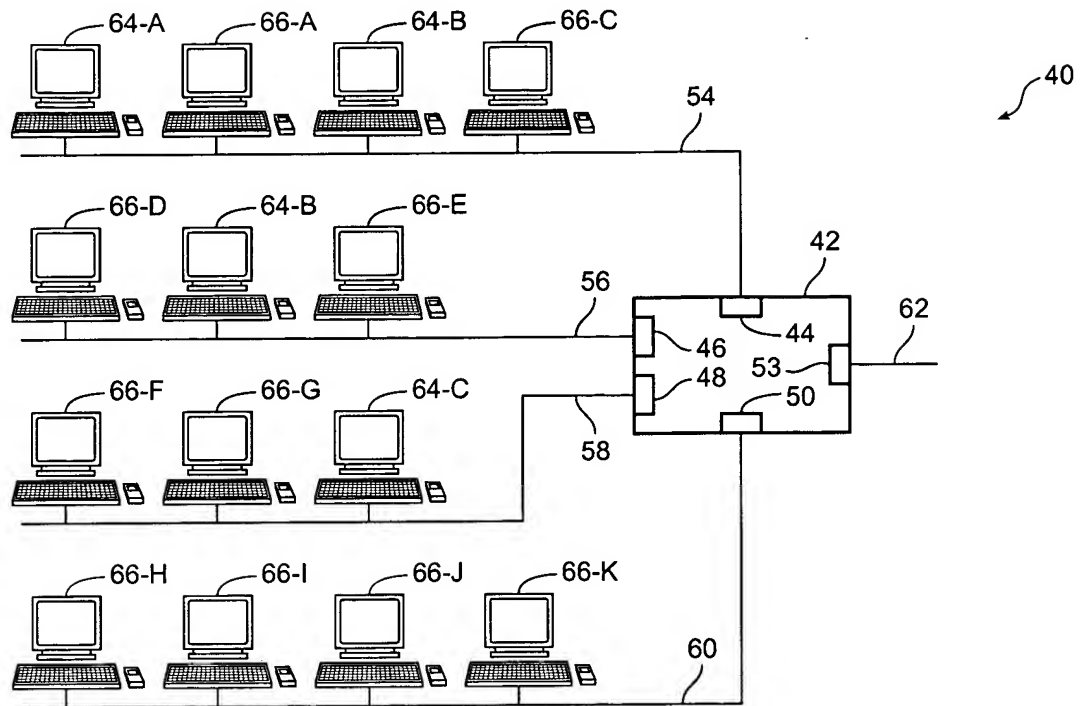


FIG. 2B

2/10



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3/10

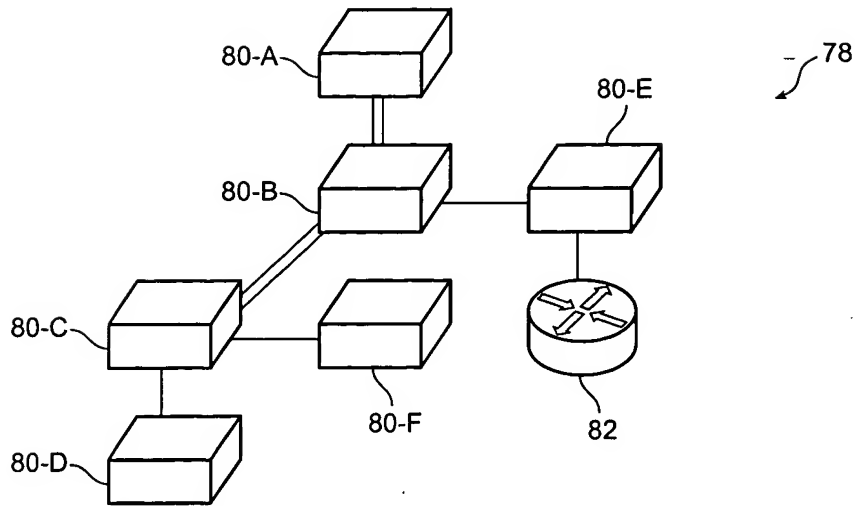


FIG. 5

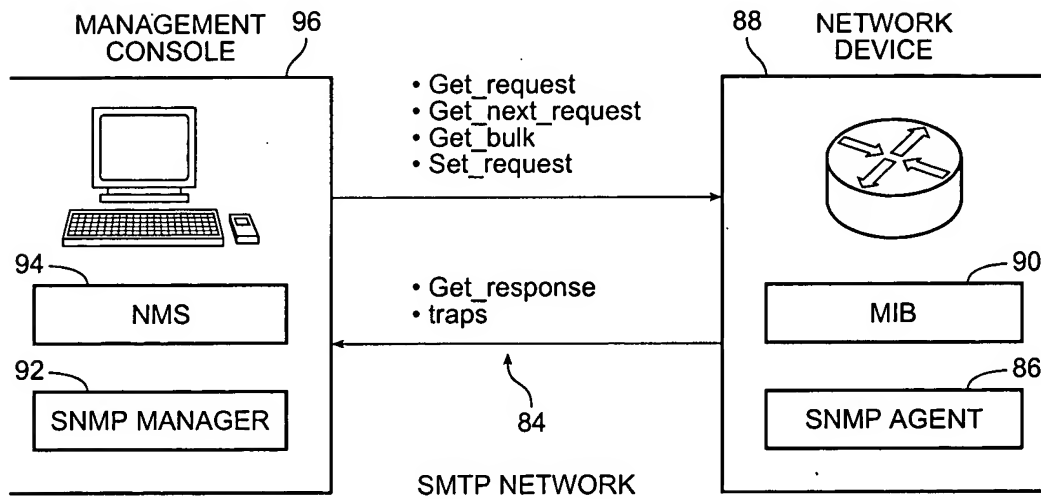


FIG. 6
(PRIOR ART)

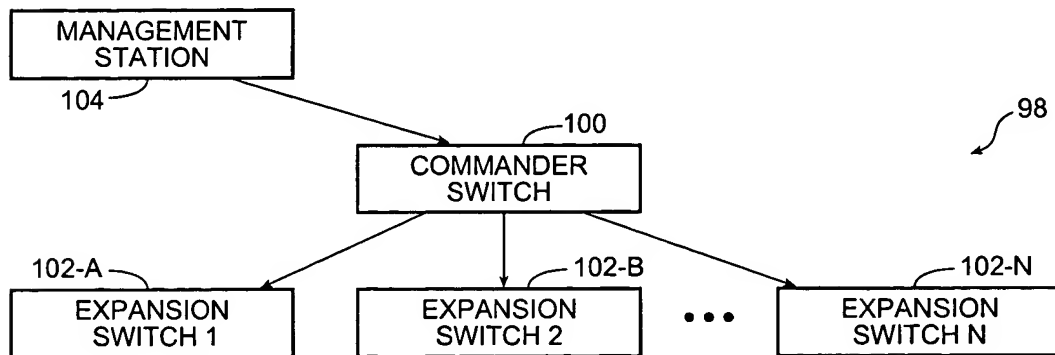


FIG. 7

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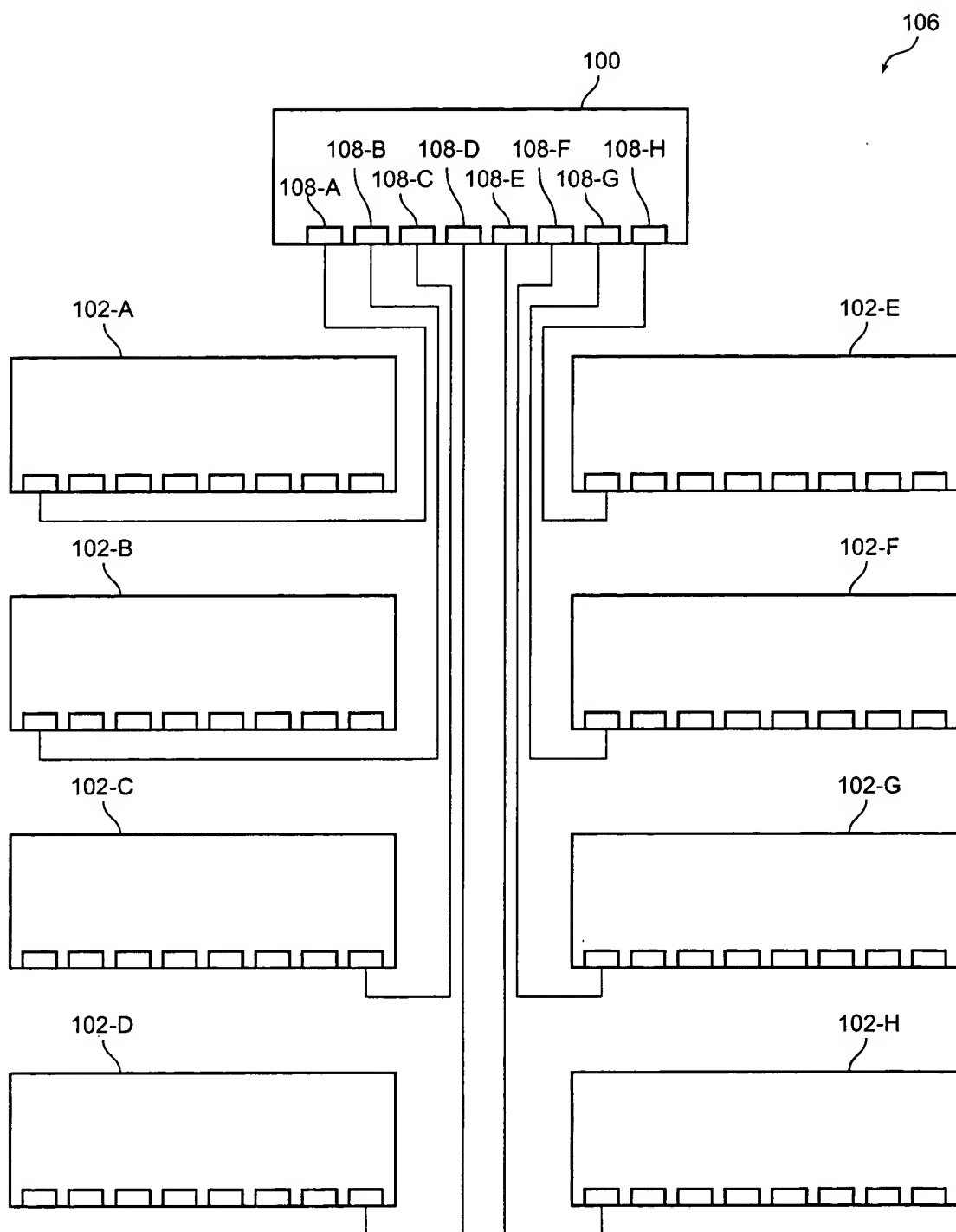


FIG. 8

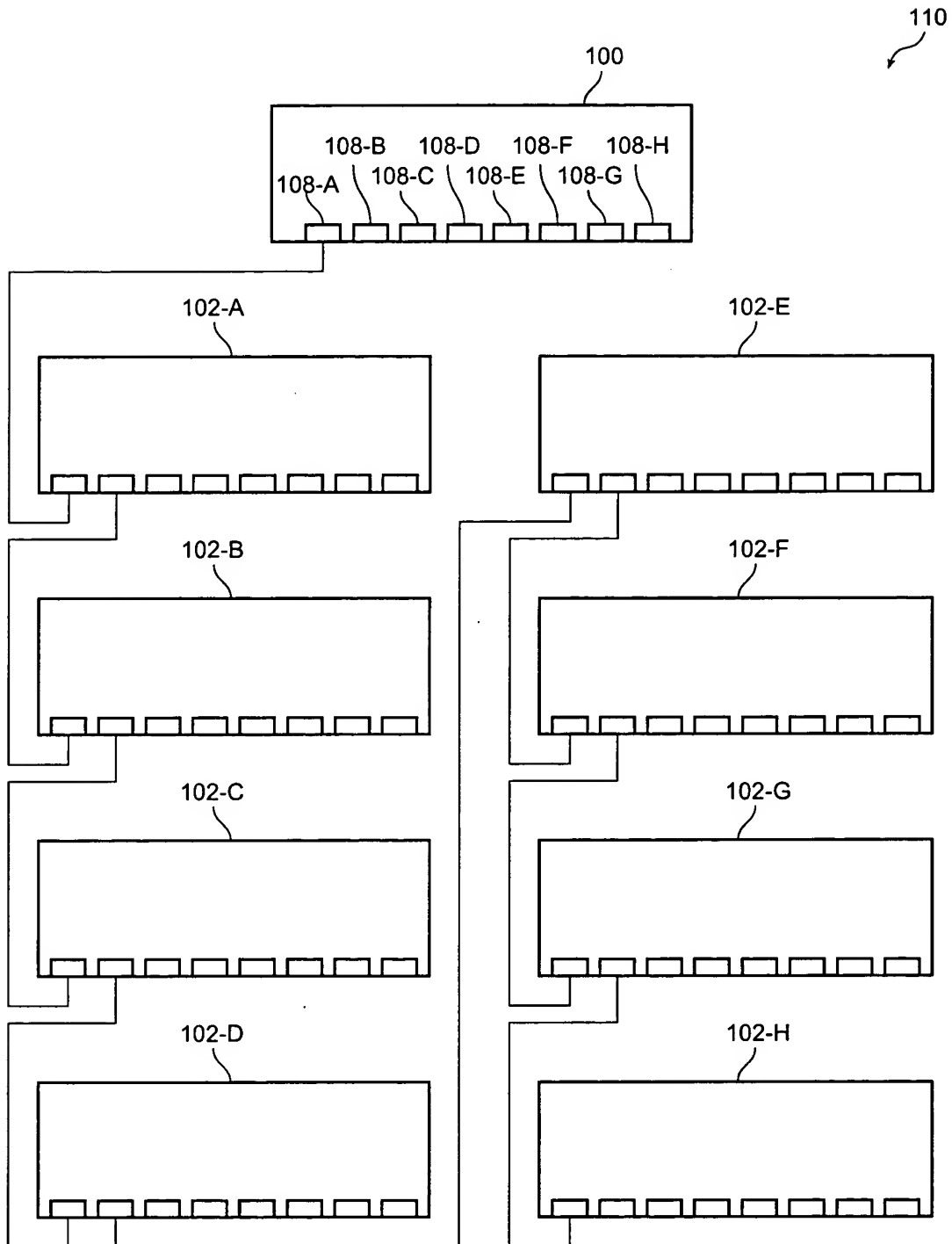


FIG. 9

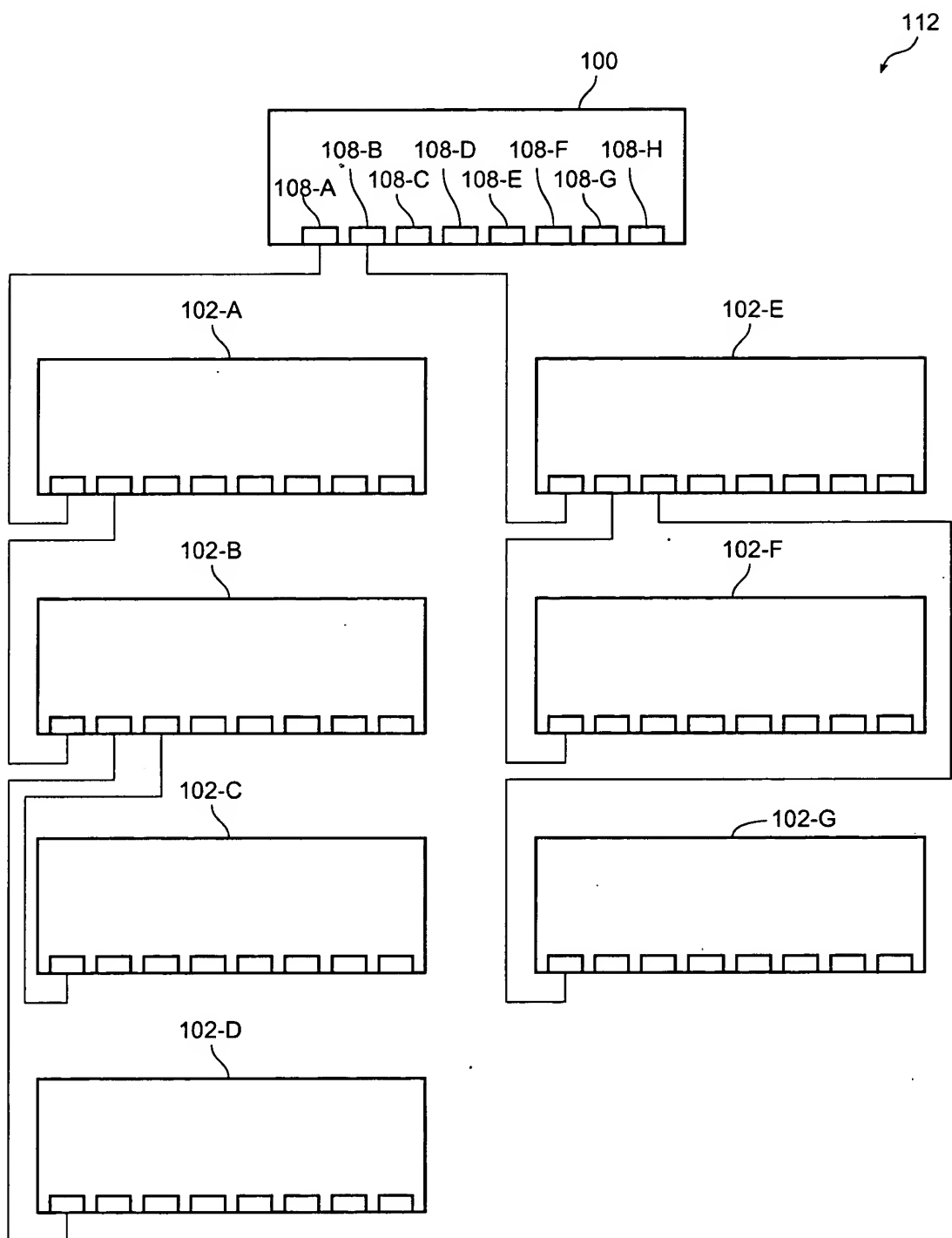


FIG. 10

7/10

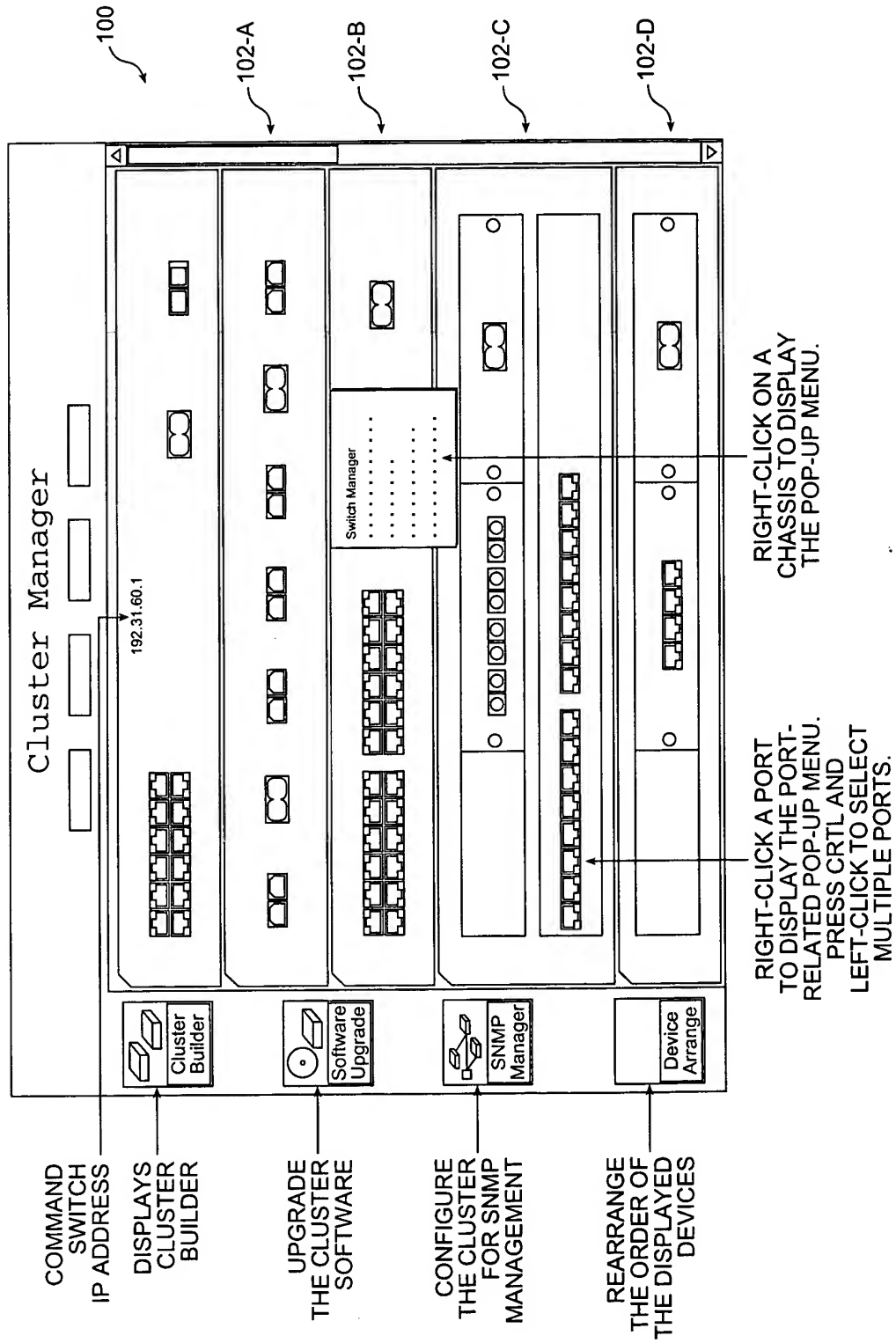


FIG. 11

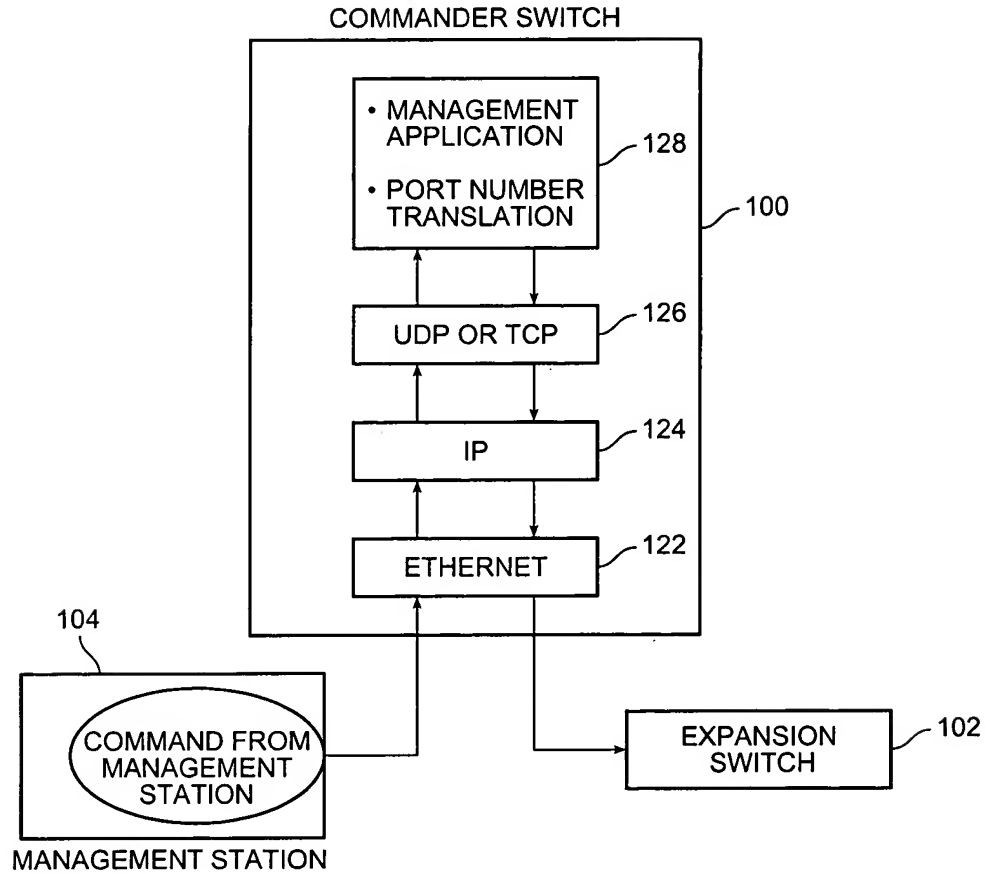


FIG. 12

9/10

```
typedef struct cluster_member_ {
    ushort mbr_num;           /* Number assigned to this member (0xFFFF if
                              non-member) */
    ushort tp_flags;         /* CMP Transport flags for this member */
    uchar mbr_flags;         /* Active - 0x01, Inactive 0x00 */
    uchar mbr_heartbeat;     /* 0 each time hb is rcvd from cmdr; increment
                              each time a heartbeat is sent. Should be 0
                              or 1 most of the time. */
    uchar mbr_numhops;       /* # CDP hops from commander */
    uchar mbr_update;        /* Counter for automatic neighbor updates */
    ipaddrtype mbr_cmpaddr;   /* assigned CMP address */
    ipaddrtype mbr_ipaddr;    /* regular IP address */
    ipaddrtype cmdr_ipaddr;   /* IP address of member's commander */
    ipaddrtype cmdr_cmpaddr;  /* CMP address assigned to commander */
    uchar cmdr_macaddr[IEEEBYTES]; /* MAC addr of member's commander */
    uchar mbr_macaddr[IEEEBYTES]; /* store instead of get each time */
    uchar mbr_CmdPortID[CDP_MAX_PORT_ID_STR_LEN];
    uchar platform_name[CDP_MAX_PLATFORM_STR_LEN];
    uchar host_name[MAX_HOST_NAME];
    uchar cluster_name[MAX_CLUSTER_NAME];
} cluster_member;
```

FIG. 13

10/10

```
typedef struct cluster_neighbor_ {
    ipaddrtype cn_cmpaddr;           /* IP address assigned to the neighbor */
    ipaddrtype cn_ipaddr;           /* Neighbor's assigned IP address */
    ulong cn_capabilities;          /* reg_invoke_edp_lookup_cache_info_1 */
    ushort cn_mbrnum;               /* 0xFFFF if not a stack member */
    uchar cn_qualification;          /* 0 Qualified
                                     1 Not cluster capable (no CMP hello)
                                     2 Not cluster capable (ver mismatch)
                                     3 cluster capable, STP-BLK at either end
                                     4 Belongs to a different stack */
    uchar cn_qualification_note;     /* 0x01 Has Configured IP address
                                     0x02 Saw > 1 CDP neighbor, not point-to-point
                                     0x04 Sender port is Fast Ethernet */
    uchar cn_sender_numhops;         /* 0-MAX_CLUSTER_SIZE, number of CDP hops to
                                     commander */
    uchar cn_mbr_fec_number;         /* 0 if single port, 1-MAX_FEC if grpd */
    uchar cn_fec_number;            /* 0 if single port, i MAX_FEC if grpd */
    uchar cn_pad;                   /* Keep it even */
    uchar cn_macaddr[IEEEBYTES];    /* MAC address of CDP sender */
    uchar cn_port_macaddr[IEEEBYTES]; /* MAC address of CDP sender port */
    uchar cn_cmdr_macaddr[IEEEBYTES]; /* MAC addr of sender's commander */
    uchar cn_portID[CDP_MAX_PORT_ID_STR_LEN]; /* CDP sender Port ID */
    uchar cn_mbr_portID[CDP_MAX_PORT_ID_STR_LEN]; /* Receiving port's ID */
    uchar cn_hostname[MAX_HOST_NAME]; /* Sender platform str */
    uchar cn_platform_name[CDP_MAX_PLATFORM_STR_LEN];
} cluster_neighbor;
```

FIG. 14

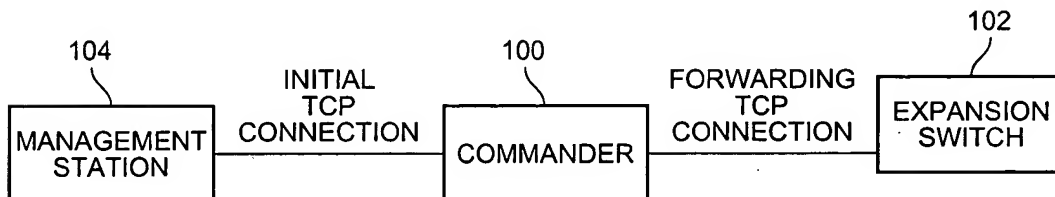


FIG. 15